AMENDED IN ASSEMBLY MAY 1, 2008

AMENDED IN ASSEMBLY APRIL 16, 2008

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CALIFORNIA LEGISLATURE—2007–08 REGULAR SESSION

ASSEMBLY BILL No. 2655

Introduced by Assembly Member DeSaulnier

February 22, 2008

An act to add Chapter 7.5 (commencing with Section 39932) to Part 2 of Division 26 of, and to add Section 43705 to, the Health and Safety Code, relating to air pollution.

LEGISLATIVE COUNSEL'S DIGEST

AB 2655, as amended, DeSaulnier. Indoor air pollution: heavy-duty vehicle crankcase emissions.

(1) Existing law generally designates the State Air Resources Board as the state agency with the primary responsibility for the control of vehicular air pollution, and air pollution control districts and air quality management districts with the primary responsibility for the control of air pollution from all sources other than vehicular sources. The state board is required to develop and adopt regulations, consistent with federal law and including specified elements, to protect public health from ozone emitted by indoor air cleaning devices, including both medical and nonmedical devices, used in occupied spaces. The state board is also required to undertake a study meeting specified requirements on indoor air pollution.

This bill would require the state board to adopt, in consultation with other state agencies, emission standards or indoor air pollution prevention and control measures, or both, applicable to school districts,

including for portable classrooms, that the state board determines to be necessary, cost effective, and technologically feasible to reduce exposure to specified sources of indoor air pollution, as provided. The state board would be required to adopt emission standards or control measures for at least 2 source categories by July 15, 2010. By imposing new duties upon local school districts, this bill would create a state-mandated local program.

(2) Existing law requires every 1963 or later model-year motor vehicle, subject to registration in the state, to be equipped with a certified device to control its crankcase emissions.

This bill would provide that no crankcase emissions be discharged directly into the ambient atmosphere from any heavy-duty diesel engine that is retrofitted with a verified diesel emission control system after January 1, 2009, or 90 days after the State Air Resources Board verifies through applicable protocols a crankcase diesel emission control system that is compatible with a Level 3 verified diesel emission control system, whichever date is later.

(3) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to these statutory provisions.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:

(a) In November of 2003, the State Air Resources Board and the State Department of Health Services issued a report to the Legislature detailing the adverse impact that poor indoor air quality is having on California schools. The report found significant indoor air quality problems, including problems with ventilation, temperature and humidity, air pollutants, floor dust contaminants, moisture, mold, noise, and lighting. Specifically, the report found all of the following:

(1) Ventilation with outdoor air was inadequate during 40 percent of classroom hours and seriously deficient during 10 percent of classroom hours in both portable classrooms and traditional site-built classrooms.

(2) Twenty-one percent of portable classrooms and 35 percent of traditional classrooms had visible water stains on the ceiling and 3 percent of portable classrooms had visible mold on the ceiling. Many classrooms do not meet workplace regulations for ventilation and moisture intrusion developed by the Occupational Safety and Health Standards Board.

(3) Formaldehyde levels in 4 percent of classrooms exceeded the guideline level established by the Office of Environmental Health Hazard Assessment to prevent short-term adverse health effects in sensitive individuals, and formaldehyde levels in virtually all classrooms exceeded the guideline level for preventing chronic effects.

(4) All classrooms, both portable and traditional, exceeded the recently developed acoustic standard of the American National Standards Institute and the World Health Organization guideline of 35 decibels for unoccupied classrooms, and 50 percent of portables and 38 percent of traditional classrooms exceeded 55 decibels, which is commonly used for outdoor nuisance noise regulations in California communities.

(b) Heating, ventilation, and air-conditioning (HVAC) systems are a primary source of excess noise in classrooms. Problems with noisy ventilation systems in classrooms have led to the underutilization of ventilation systems, which causes increased indoor air quality problems.

(c) Asthma in pupils and teachers can be exacerbated by poor indoor air quality in schools. Known asthma triggers include airborne particulate matter, chemical contaminants, and allergens, including dust mites and mold.

(d) In February 2005, the State Air Resources Board approved an indoor air quality report which cites proven health and economic benefits to reducing indoor air pollution, which is estimated to cost California forty-five billion dollars ($45,000,000,000) per year.

(e) The report noted that children are particularly vulnerable to poor indoor air quality. According to the report, children under 12 years of age spend about 86 percent of their time indoors, with 21 percent of the time being spent in schools.

(f) Because a child's immune system is not fully developed, a child's body is more susceptible to chemicals that may affect lung development and function. And because children and infants inhale more air and tend to be more active than adults in the same environment, those factors put children at greater risk.

(g) There are many sources of indoor air pollution, including biological contaminants, building materials and furnishings, secondhand smoke, consumer products, pesticides, combustion appliances, household and office equipment, air cleaners that emit ozone, architectural coatings, chlorinated water, and soil containing radon gas.

(h) There are many simple things that can be done, most at little or no cost, which can quickly improve indoor air quality. These include better ventilation system maintenance and operation, proper building maintenance and cleaning practices, and professional training and education of the building operation staff.

(i) It is the policy of the state that school facilities be designed and operated using reasonably available measures to provide a healthy indoor environment for pupils, including, but not limited to, healthy indoor air quality and adequate ventilation.

SEC. 2. The Legislature finds and declares all of the following:

(a) Diesel exhaust particulate matter (PM) has been identified by the state as a toxic air contaminant that contributes every year to 2,000 premature deaths and thousands of hospital admissions, asthma attacks and other respiratory symptoms, and lost workdays. Overall, diesel engine emissions are responsible for the majority of California's known cancer risk from outdoor air pollutants.

(b) PM is emitted from the crankcase of diesel engines as well as its exhaust system. From 1990 to 2007, inclusive, allowable levels of exhaust PM from on-road diesel engines have been reduced by 60-fold, but crankcase emissions have not been controlled. As a result, crankcase emissions equal 50 to 70 percent of total exhaust and crankcase PM emissions from a diesel engine that meets the on-road 2007 standard for diesel PM emissions.

(c) Multiple studies have measured the level of PM2.5 emissions from the crankcase and exhaust tailpipe of schoolbuses and concluded that the concentration of PM2.5 found inside the cabin of the schoolbus is dominated by PM emitted from the crankcase. According to one study, crankcase emissions proved to be an extremely strong source of PM2.5 in the schoolbus.

(d) The New Jersey Department of Environmental Protection has concluded that the retrofit of schoolbuses to control crankcase as well as tailpipe emissions will result in considerable reduction in asthma attacks, an important reduction in noncancer risk, and a modest reduction in lifetime cancer risk for children riding on the buses.

(e) As a result of these findings, New Jersey has required that all schoolbuses be retrofitted to control crankcase PM.

(f) Cost-effective equipment exists to eliminate crankcase emissions of PM.

(g) It is in the interest of the people of California, particularly the school children who ride schoolbuses and other Californians who are exposed to emissions of crankcase PM into the cabins of heavy-duty vehicles, to reduce exposure to crankcase emissions of PM to the extent feasible.

SEC. 3. Chapter 7.5 (commencing with Section 39932) is added to Part 2 of Division 26 of the Health and Safety Code, to read:

Chapter 7.5. Indoor Air Pollution

39932. (a) The state board shall, in consultation with the State Department of Public Health, the State Energy Resources Conservation and Development Commission, the Division of Occupational Safety and Health, and other appropriate state agencies, adopt emission standards or indoor air pollution prevention and control measures, or both, applicable to school districts, including for portable classrooms, that the state board determines to be necessary, cost effective, and technologically feasible to reduce exposure to toxic air contaminants identified pursuant to Sections 39655, 39657, and 39660, air pollutants for which the state board has adopted ambient air quality standards, molds, excess moisture, allergens, noise, or other physical or biological threats to indoor air quality, as identified by the state board.

(b) In carrying out the requirements of subdivision (a), the state board shall publish and make available a schedule that prioritizes the adoption of emission standards or indoor air pollution prevention and control measures for those source categories described in subdivision (a) that pose the greatest risk to schoolchildren. The state board shall adopt emission standards or

control measures for at least two source categories by July 15, 2010.

(c) In carrying out the requirements of subdivision (a), the state board, in consultation with the State Department of Public Health, the State Energy Resources Conservation and Development Commission, the Division of the State Architect, the Office of Public School Construction, and other appropriate state agencies, shall develop and establish a program for the prevention and control of indoor air pollution that includes, but is not limited to, all of the following elements:

(1) Education and community outreach.

(2) Training and certification for school facility managers, custodial staff, teachers, or inspectors. In developing certification standards, the state board shall consider the certification programs of the Testing, Adjusting and Balancing Bureau, the National Environmental Balancing Bureau, the Associated Air Balance Council, and other appropriate programs.

(3) Self-assessment protocols and indoor environmental quality management plans, based in part on the United States Environmental Protection Agency's Indoor Air Quality Tools for Schools Program or the Healthy School Environments Assessments Tool (HealthySEAT).

(4) Model or best practice guidelines for the design, construction, operation, and maintenance of new and existing schools, based in part on guidelines developed by the Collaborative for High Performance Schools.

(5) Building commissioning procedures to achieve, verify, and document that the performance of school facilities, systems, and assemblies meets defined objectives and criteria.

(d) In performing maintenance or repairs on a heating, ventilation, and air-conditioning (HVAC) system to meet the requirements of the regulations to be developed pursuant to this section, a school district shall utilize contractors or school district employees who are certified by at least one of the following organizations:

(A) The International Training Institute for the Sheet Metal and Air Conditioning Industry.

(B) North American Technical Excellence.

(C) UA S.T.A.R.

SEC. 4. Section 43705 is added to the Health and Safety Code, to read:

43705. (a) For the purposes of this section, the following terms have the following meanings:

(1) "Crankcase emissions" means airborne substances emitted into the atmosphere from any portion of the engine crankcase ventilation or lubrication system.

(2) "Heavy-duty engine" means an engine that is used to propel a heavy-duty vehicle.

(3) "Heavy-duty vehicle" means any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, except passenger cars.

(b) Unless otherwise permitted in Division 3 (commencing with Section 1900) of Title 13 of the California Code of Regulations, no crankcase emissions shall be discharged directly into the ambient atmosphere from any heavy-duty diesel engine that is retrofitted with a verified diesel emission control system after January 1, 2009, or 90 days after the state board verifies through applicable protocols a crankcase diesel emission control system that is compatible with a Level 3 verified diesel emission control system, whichever date is later.

~~(c) Any retrofit to control crankcase emissions conducted pursuant to this section is eligible for funding made available by any program that includes among its purposes the reduction of particulate matter emissions for heavy-duty engines, including, but not limited to, all of the following:~~

~~(1) The Lower-Emission School Bus Program administered by the state board.~~

~~(2) The Carl Moyer Memorial Air Quality Standards Attainment Program established pursuant to Chapter 9 (commencing with Section 44275) of Part 5 of Division 26.~~

~~(3) Emission reduction activities funded pursuant to paragraph (2) of subdivision (c) of, or subdivision (d) of, Section 8879.23 of the Government Code.~~

~~(4) Emission reduction activities pursuant to Section 44274.~~

(c) It is the intent of the Legislature that the state board take the necessary steps to ensure that in-cabin exposure to crankcase emissions of particulate matter are eliminated as early as feasible.

SEC. 5. If the Commission on State Mandates determines that this act contains costs mandated by the state, reimbursement to

local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code.

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